### Chapter 1

## PURPOSE OF AND NEED FOR ACTION

In February 1998, the U.S. Department of the Interior (Interior) and California Department of Water Resources (CDWR) jointly issued a draft environmental impact statement/environmental impact report (DEIS/EIR) evaluating a draft Truckee River Operating Agreement (TROA) and a No Action Alternative. That agreement was based on elements that negotiators tentatively agreed to in May 1996. Because negotiations continued after the February 1998 DEIS/EIR was released, many elements of that agreement were revised, and a new Draft Agreement was issued by the parties in October 2003 and a revised DEIS/EIR was prepared and released for public review in August 2004. Further negotiations culminated on August 28, 2007, in an agreement acceptable to negotiators for all signatories—the proposed Negotiated Agreement — (included as the Negotiated Agreement Appendix), which is the basis for this final environmental impact statement/environmental impact report (EIS/EIR).

The lead agencies for this study are Interior and CDWR. This document is a joint Federal-State document prepared by three Interior bureaus—Bureau of Reclamation (Reclamation), Fish and Wildlife Service (FWS), and Bureau of Indian Affairs—and by CDWR.

This final EIS/EIR describes (1) TROA, the proposed action and preferred alternative; (2) an alternative to TROA, the Local Water Supply Alternative; and (3) a No Action Alternative (chapter 2). It also describes the current status of resources (e.g., hydrologic, biological, socioeconomic, and cultural) of the study area and presents an evaluation of the potential effects of the alternatives on these resources (chapter 3).

This final EIS/EIR complies with the National Environmental Policy Act of 1969 (NEPA)<sup>2</sup> and with the Council on Environmental Quality regulations that implement NEPA, as well as with the California Environmental Quality Act (CEQA)<sup>3</sup> and the regulations that implement CEQA, commonly known as the "CEQA Guidelines." This document will also be used to satisfy consultation requirements of the Fish and Wildlife Coordination Act; the Federal Endangered Species Act (ESA) of 1973, as amended; the California Endangered Species Act; and section 106 of the National Historic Preservation Act of 1966, as amended, as addressed in chapter 5. Also, as addressed in chapter 5, this document complies with the cultural resources consultation requirements of CEQA.

<sup>&</sup>lt;sup>1</sup> For the purposes of the revised DEIS/EIR, the draft Truckee River Operating Agreement was referred to as the Draft Agreement, distinct from TROA; for the purposes of this final EIS/EIR, TROA refers to both the proposed Negotiated Agreement and proposed action.

<sup>&</sup>lt;sup>2</sup> 42 United States Code (U.S.C) section 4321 *et sea*.

<sup>&</sup>lt;sup>3</sup> California Public Resources Code section 21000 *et seq*.

## I. Proposed Action

This final EIS/EIR considers the following elements as part of the proposed action:

- Signing, adoption, and implementation of TROA by the Secretary of the Interior (Secretary) and California, including subsequent promulgation of TROA as a Federal rule when also signed by the other mandatory and optional signatories.
- Changing California water rights permits, licenses, and appropriations to allow the water storage, transfers, and exchanges that are provided for in TROA.
- Entering into contracts with the owners of Credit Water created pursuant to TROA for the storage of Credit Water in Truckee River reservoirs.

## II. Purpose of and Need for Proposed Action

The primary purpose of the proposed action is to implement section 205(a) of Public Law (P.L.) 101-618<sup>4</sup> (attachment A of this EIS/EIR) in order to secure the intended benefits for the Lake Tahoe and Truckee River basins. (See Section V, "Background and History," for a description of the laws, decrees, and agreements that govern Truckee River operations.)

Paragraph 205(a)(1) directs the Secretary to negotiate an agreement (i.e., TROA) with California and Nevada, after consultation with other parties designated by the Secretary or the States, to increase the operational flexibility and efficiency of reservoirs in the Lake Tahoe and Truckee River basins. These reservoirs include Federal reservoirs and non-Federal reservoirs. The Federal reservoirs, also known as the Truckee River reservoirs, are Lake Tahoe and Boca, Prosser Creek, Martis Creek, and Stampede Reservoirs. The non-Federal reservoirs are Donner and Independence Lakes. Federal and non-Federal reservoirs are collectively referred to in this document as "all reservoirs."

<sup>&</sup>lt;sup>4</sup> Title II of P.L. 101-618 is known as the Truckee-Carson-Pyramid Lake Water Rights Settlement Act of 1990.

<sup>&</sup>lt;sup>5</sup> The collective terms "Truckee River reservoirs," "Federal reservoirs," and "non-Federal reservoirs" may each be used in this document; reservoirs are also referenced individually. The term "Truckee River reservoirs" is used interchangeably with the term "Federal reservoirs." "Truckee River reservoirs" is defined in P.L. 101-618, Title II, as "the storage provided by the dam at the outlet of Lake Tahoe, Boca Reservoir, Prosser Creek Reservoir, Martis Reservoir, and Stampede Reservoir."

Paragraph 205(a)(2) directs that such agreement must:

- Carry out the terms, conditions, and contingencies of the Preliminary
   Settlement Agreement as Modified by the Ratification Agreement (PSA).<sup>6</sup>
- Provide for enhancement of spawning flows<sup>7</sup> available in the lower Truckee River<sup>8</sup> for the Pyramid Lake fishes (i.e., federally endangered cui-ui and threatened Lahontan cutthroat trout [LCT]) in a manner consistent with the Secretary's responsibilities under ESA.
- Ensure that water is stored in and released from Truckee River facilities to satisfy the exercise of water rights in conformance with the *Orr Ditch* and *Truckee River General Electric* decrees.
- Satisfy all applicable dam safety and flood control requirements.
- Minimize the Secretary's costs associated with operation and maintenance of Stampede Reservoir.

PSA (attachment B) is a 1989 agreement between Sierra Pacific Power Company (Sierra Pacific)<sup>9</sup> and the Pyramid Lake Paiute Tribe of Indians (Pyramid Tribe) to change the operation of Federal reservoirs and Sierra Pacific's exercise of its Truckee River water rights to (1) improve spawning conditions for the Pyramid Lake fishes and (2) provide additional municipal and industrial (M&I) water for the Reno-Sparks metropolitan area

<sup>&</sup>lt;sup>6</sup> The original PSA was modified by the Congress to include the United States, and references to it should now include the language "as Modified by the Ratification Agreement."

<sup>&</sup>lt;sup>7</sup> The term "spawning flows" is generic for riverine fish habitat.

<sup>&</sup>lt;sup>8</sup> The term "lower Truckee River" refers to the reach downstream from Derby Diversion Dam to Pyramid Lake.

<sup>&</sup>lt;sup>9</sup> The revised DEIS/EIR referenced Sierra Pacific as the party signatory to TROA. On June 11, 2001, Sierra Pacific transferred its water company serving the Reno-Sparks metropolitan area (Truckee Meadows) to the newly-created municipal entity, Truckee Meadows Water Authority (TMWA). TMWA is recognized as the principal water purveyor for Truckee Meadows. After receiving required approvals from the California Public Utility Commission and after June 11, 2001, Sierra Pacific conveyed all of its water rights associated with three of its Truckee River hydroelectric powerplants to TMWA and now is in the process of transferring title to those hydroelectric powerplants to TMWA. While transfer of water rights and ownership associated with Farad facilities have been delayed by the process to rebuild Farad Diversion Dam, those actions related to Farad facilities as well are assumed to be completed at some future time, and, for the purpose of description and analysis in this document, TMWA is presumed to have assumed ownership of water rights and property for the four Truckee River hydroelectric powerplants. Therefore, the final EIS/EIR refers to TMWA as the party signatory to TROA, and Sierra Pacific is referred to primarily in a historical context.

By Federal law, contracts and agreements to which the United States is a party may not be assigned to another party without the consent of the United States. In this matter, Sierra Pacific has sought to assign its rights and obligations under the Preliminary Settlement Agreement that Congress identified in Sec. 205(a)(2)(c) of P.L. 101-618, and under two Federal Court decrees prescribing the manner of operation of Federal reservoirs on the Truckee River. Accordingly, the United States must give its assent to these assignments if they are to be valid under Federal law. Approval of the assignments from Sierra Pacific to TMWA is in process.

(Truckee Meadows) during drought situations. Section 29(f) of PSA states that PSA cannot take effect until an operating agreement (i.e., TROA) has been executed by at least the United States, the Pyramid Tribe, and Sierra Pacific.

The proposed action would also increase boating- and fishing-related recreational opportunities in Federal reservoirs in California, improve streamflows and fish habitat in the Truckee River and its three main tributaries, and help improve water quality in the Truckee River downstream from Truckee Meadows. Paragraph 205(a)(3) states that an operating agreement may address other matters including, but not limited to, the following:

- Administration of TROA
- Means of ensuring compliance with PSA
- Operations of Truckee River system facilities that will not be changed
- Operations and procedures for using Federal reservoirs to ensure compliance with ESA
- Methods for reducing the likelihood that Lake Tahoe will drop below its natural rim and for improving the efficient use of Lake Tahoe under extreme drought situations
- Procedures for managing and operating Federal reservoirs
- Procedures for operating Federal reservoirs for beneficial uses in streams
- Procedures for operating non-Federal reservoirs in the Truckee River basin to the extent that owners of affected storage rights become parties to TROA
- Procedures and criteria for implementing California's allocation of Truckee River water

TROA's entry into effect is also a condition precedent to the effectiveness of the California-Nevada Interstate Allocation (section 204 of P.L. 101-618) of waters of the Lake Tahoe and Truckee River basins, and the confirmation of the *Alpine* decree as part of the interstate allocation for the Carson River basin.

Additionally, paragraph 210(b)(9) of P.L.101-618 requires the Secretary to comply with Federal environmental and wildlife conservation laws, such as ESA, in taking action under section 205.

Finally, because implementation of TROA would entail changes in the use of Truckee River reservoirs, the water right licenses and permit issued by the California State Water Resources Control Board (SWRCB) for those reservoirs must be changed. Sections 1250 through 1398 and 1700 through 1740 of the California Water Code (CWC) provide procedures for appropriating water and for changing the points of diversion, rediversion, and redistribution; purposes of use; and places of use of post-1914 appropriative and other water rights, respectively. SWRCB is responsible for the administration of post-1914 appropriative water rights in California (CWC 174). In general, before approving a water right change petition or application to appropriate water, SWRCB must publicly notice the petition and consider any comments that are filed against the proposed change or application, hold a hearing or field investigation if the comments cannot be resolved through negotiation, consider the environmental effects of the proposed change(s) or application(s) in compliance with CEQA, section 21000 et seq. of the California Public Resources Code, and find that the proposed change(s) or application(s) will not operate to the injury of any legal user of the water involved. In its approval, SWRCB can include terms and conditions to protect the water rights, public trust, and public interest, as necessary, consistent with the law and SWRCB's findings.

#### III. Decision Process and Decisions Needed

#### A. Use of Final EIS/EIR by the Secretary

The Secretary will use the final EIS/EIR in deciding whether or not to sign and adopt TROA, as finally negotiated. Section 205(a)(9) of P.L. 101-618 specifically requires: "The Secretary may not become a party to the operating agreement if the Secretary determines that the effects of such action, together with cumulative effects, are likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of any designated critical habitat of such species." This determination is made through consultation with FWS under section 7 of ESA.

## B. Use of Final EIS/EIR by California

CEQA requires the final EIS/EIR to list agencies that may use the EIR in their decision process and to list agency approvals expected to be based on the conclusions of the EIR.

California will consider the final EIS/EIR in deciding whether or not to sign and adopt TROA, as finally negotiated.

In accordance with section 2053 of the California Fish and Game Code (California Endangered Species Act) it is the policy of California that State agencies should not approve projects as proposed that would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse

modification of habitat essential to the continued existence of those species if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would avoid jeopardy.

Reclamation, Washoe County Water Conservation District (WCWCD), and TMWA have filed water right change petitions and applications (change petitions and applications) with SWRCB. Change petitions were filed to add points of diversion, rediversion, and redistribution; purposes of use; and places of use to the post-1914 appropriative water rights for Prosser Creek, Boca, and Stampede Reservoirs and Independence Lake, and two time extension petitions for Stampede Reservoir seeking additional time for the changes to be implemented and water to be put to beneficial use. Applications were filed to appropriate water in Stampede and Prosser Creek Reservoirs. (See the SWRCB Notice of Petitions and Water Appropriation Applications Appendix.) If and when SWRCB approves these change petitions and water appropriation applications, the owners will be able to operate the reservoirs in accordance with the exchange provisions of TROA. SWRCB may use this final EIS/EIR in deciding whether or not to approve the change petitions and water appropriation applications.

### C. Steps to Completion of TROA

A number of statutory and regulatory procedures must be completed before TROA can be implemented. The NEPA/CEQA process must be completed before TROA can be approved by the Secretary and California. The first steps in this process were publication of the DEIS/EIR and, later, the revised DEIS/EIR for public comment, based on the Draft Agreement. Following the close of the comment period for the revised DEIS/EIR, the negotiators considered the comments and other issues that required resolution, and modified the Draft Agreement, as appropriate, to make it acceptable for signature by the negotiators for all signatories. The next step was to prepare this final EIS/EIR for public review. The final step is to prepare a Record of Decision (ROD). A ROD can be published a minimum of 30 days after the Notice of Availability of the final EIS/EIR is published in the Federal Register. A ROD is a Federal document that identifies the alternative selected for implementation among the alternatives considered in an environmental impact statement (in this instance, EIS/EIR) and any conditions that might apply to its implementation. Preparation of the ROD completes the NEPA process. Once the TROA alternative is selected and the ROD signed, the Secretary is authorized to approve TROA.

CEQA requires that, prior to approving TROA, the lead agency (CDWR) must certify that the final EIS/EIR has been completed in compliance with CEQA, that the decision maker has reviewed and considered the information in the final EIS/EIR, and that the final EIS/EIR reflects the lead agency's independent judgment.

The other mandatory signatories—Nevada, the Pyramid Tribe, and TMWA—must also approve TROA. <sup>10</sup> Once TROA has been approved by the mandatory signatories, it must be promulgated as a Federal regulation and published in the *Federal Register*.

TROA must also be submitted to the U.S. District Courts that supervise and administer the *Orr Ditch* and *Truckee River General Electric* decrees (Section V, "Background and History") for approval of any necessary modifications in the provisions of those decrees. Reclamation will negotiate storage contracts with the various parties that will enable them to store their water in Federal reservoirs pursuant to TROA. This final EIS/EIR will satisfy NEPA requirements for those storage contracts.

TROA has been negotiated as a settlement of litigation and by law cannot become effective until certain litigation has been resolved. Section 210(a)(1) of P.L. 101-618 requires the dismissal of five specific Truckee River lawsuits with prejudice, or other final resolution, before TROA and other specified provisions of P.L. 101-618 become effective. At the same time, the dismissal of this litigation depends on the execution by the mandatory signatories—the Secretary, California, Nevada, and the parties to PSA (Pyramid Tribe and TMWA as the successor to Sierra Pacific)—of an operating agreement that satisfies the requirements of sections 205(a)(2) and 205(a)(9), and which is approved by the *Orr Ditch* and Truckee River *General Electric* courts, and published as a Federal regulation.

The provisions of P.L. 101-618 which section 210(a)(2) makes contingent upon TROA and the dismissal of litigation are as follows:

- Interstate allocations between Nevada and California of the waters of Lake Tahoe, the Truckee River and the Carson River (section 204)
- PSA
- Pyramid Lake Paiute Economic Development Fund (section 208(a)(3)(d))

In addition, two separate actions are related to TROA. Reclamation, WCWCD, and TMWA have filed change petitions and applications with SWRCB in advance of TROA becoming effective, to add points of diversion, rediversion, and redistribution; purposes of use; and places of use in (in California and Nevada) to the California licenses and permits for Prosser Creek, Stampede, and Boca Reservoirs and Independence Lake, and

<sup>&</sup>lt;sup>10</sup> While section 205(a)(4) specifies that TROA shall be executed by the Secretary, and California and Nevada to enter into effect, section 205(a)(1)(C) requires TROA to carry out the terms of the Preliminary Settlement Agreement, which then included the Pyramid Tribe and Sierra Pacific. These five parties—the Secretary, California, Nevada, Tribe, and Sierra Pacific (now TMWA)—are collectively referred to as the "mandatory signatories."

<sup>&</sup>lt;sup>11</sup> The U.S. District Courts that supervise and administer the *Truckee River General Electric*, *Orr Ditch*, and *Alpine* decrees also are referred to as the *Truckee River General Electric*, *Orr Ditch*, and *Alpine* courts, respectively, in this document.

two time extension petitions for Stampede Reservoir seeking additional time for the changes to be implemented and water to be put to beneficial use. As a responsible agency under CEQA, SWRCB may use this final EIS/EIR in determining whether and how to approve any change petitions or water appropriation applications submitted pursuant to TROA. The changes and appropriations proposed by Reclamation would not become effective unless and until TROA is executed and, by its terms, becomes effective. And, to complete storage contracts with TMWA, California, Reno, Sparks, Fernley, Washoe County, and WCWCD, Reclamation's Director of the Mid-Pacific Region must receive approval from the Commissioner of Reclamation via a "basis of negotiation" to initiate formal negotiations with the parties. Upon completion of negotiations and formal approval by the contracting parties, the contracts will be available to the public for comment. Following the public comment period, the Commissioner must approve the draft contracts and the regional director will execute the contracts, contingent upon TROA becoming effective.

Also, TROA would rely on the authority in Operating Criteria and Procedures (OCAP) to allow Newlands Project Credit Water operations as provided in OCAP as well as in TROA, following the Federal rulemaking process. Those additional operations would address storage of Floriston Rate Water or Truckee River flow in excess of Floriston Rates or Reduced Floriston Rates in Truckee River reservoirs to create, exchange, and release Newlands Project Credit Water. The potential environmental effects of all such Credit Water are addressed in this document.

Furthermore, as identified in Article Twelve of TROA, the following conditions remain to be satisfied before it enters into effect:

- United States acknowledges that the indemnity agreement executed by Sierra Pacific, WCWCD, and Truckee-Carson Irrigation District (TCID), dated July 1, 1935, is no longer in effect.
- Certain litigation initiated by the Pyramid Tribe is resolved.
- The U.S. District Courts responsible for the *Truckee River General Electric* and *Orr Ditch* decrees have approved the modification of the decrees as necessary to allow for the implementation of TROA.
- Change petitions for Truckee River reservoir storage licenses and permit, and the Independence Lake license, are approved by SWRCB. Applications for changes in place of use, manner of use, and points of diversion of water rights are approved by the Nevada State Engineer. (Changes would not be effective unless and until TROA is executed and, by its terms, becomes effective.)

 $<sup>^{12}</sup>$  See chapter 2, tables 2-2 and 2-7, for definitions of these water categories.

- Independence Lake vested storage water rights are changed to allow Credit Water to be accumulated.
- Pyramid Tribe's water right granted under Nevada State Engineer Ruling 4683 to the remaining waters of the Truckee River is confirmed.

## IV. Study Area

The study area includes the 3,060-square-mile Truckee River basin in northeastern California and northwestern Nevada, Lahontan Reservoir, and the lower Carson River basin<sup>13</sup> in northwestern Nevada. The two basins are hydraulically linked by the Truckee Canal, which extends from Derby Diversion Dam on the Truckee River to Lahontan Reservoir on the Carson River. (See location map.)

The Truckee River originates at the outlet of Lake Tahoe at Tahoe City, California, and flows approximately 120 miles to Pyramid Lake, a terminal lake that is part of and located within the Pyramid Lake Indian Reservation. The Carson River originates in the Sierra Nevada south of Lake Tahoe and flows about 125 miles to Lahontan Reservoir, which captures Carson River inflow plus water diverted from the Truckee River via the Truckee Canal.

Most of the runoff in the Truckee River basin originates in the Sierra Nevada in California. A portion of that runoff is stored in Federal and non-Federal reservoirs located in California: Lake Tahoe (the top 6.1 feet of which are regulated by Lake Tahoe Dam), and Prosser Creek, Stampede, and Boca Reservoirs (all Federal); Donner Lake (which includes storage space jointly owned by TMWA and TCID); and Independence Lake (owned and operated by TMWA). Operation of these reservoirs regulates much of the flow in the Truckee River basin in most years.

While Truckee River runoff is stored in California, most of the stored water is used in Nevada to meet M&I demands in Truckee Meadows, fish flow requirements, hydroelectric power demands, and irrigation demands. The amount of Truckee River flow diverted at Derby Diversion Dam to the Truckee Canal to serve water rights in the Newlands Project varies monthly and annually depending on irrigation demand, Lahontan Reservoir storage, and forecast Carson River runoff into the reservoir. The Newlands Project includes the Truckee Division (in and around Fernley, Nevada) and the larger Carson Division (in and around Fallon, Nevada) in the lower Carson River basin. TCID has a contract with Reclamation to operate the Newlands Project.

<sup>&</sup>lt;sup>13</sup> The lower Carson River begins at the outlet of Lahontan Reservoir and flows through Lahontan Valley to its terminus in the Carson Sink.

## V. Background and History

#### A. History of Reservoir and River Operations

The first facility to impound the waters of the Truckee River was a private timber crib dam constructed at the outlet of Lake Tahoe in 1870. Construction of this dam initiated a series of disputes over rights to the use of the waters of Lake Tahoe and the Truckee River. The dam was used to regulate flows in the Truckee River so that logs could be floated to saw mills in Truckee, California. It also was used for milling purposes and to generate hydroelectric power. Several small run-of-the-river hydroelectric powerplants were constructed on the Truckee River around the turn of the 20<sup>th</sup> century. In 1908, the Truckee River General Electric Company, predecessor to Sierra Pacific, purchased the dam from the Floriston Pulp and Paper Company and the Floriston Land and Power Company and agreed to maintain specific flows (Floriston Rates) at the State line.

Following enactment of the Reclamation Act of 1902, the Secretary authorized construction of the Newlands Project, and the Reclamation Service (predecessor of Reclamation) began construction of Derby Diversion Dam and the Truckee Canal, which were completed in 1905 and 1906, respectively.

In 1903, Reclamation made claim to rights to the water stored in Lake Tahoe for delivery to the Newlands Project. The United States subsequently filed a condemnation lawsuit and entered into a series of lengthy negotiations with the owners of Lake Tahoe Dam and other local interests. These negotiations culminated in a 1915 Federal court decree known as the *Truckee River General Electric* decree, which gave the United States an easement for and the right to operate Lake Tahoe Dam and its controlling works. Between 1909 and 1913, Reclamation and the Electric Company reconstructed the dam at Lake Tahoe to its present configuration. The dam controls the top 6.1 feet of storage at Lake Tahoe as a Federal reservoir. 14

In 1913, to secure water rights for the Newlands Project and Pyramid Lake Indian Reservation, the United States filed a quiet title action in Federal court in Reno, Nevada. This lawsuit, *United States* v. *Orr Water Ditch Company, et al.*, No. A-3, sought a comprehensive determination of water rights on the Truckee River and its tributaries and named as defendants all water users on the Truckee River in Nevada. In 1924, the special master assigned to hear the case issued a report and proposed decree, which was accepted by the Federal court and formed the basis of a temporary restraining order in 1926.

A severe drought from 1929 to 1935 resulted in extensive controversy among Reclamation, irrigators (both in Newlands Project and Truckee Meadows), and

<sup>&</sup>lt;sup>14</sup> The natural lake rim and the dam at Tahoe City (creating the reservoir portion of the lake) restrict discharge from Lake Tahoe. The natural lake rim is at an elevation of 6,223.0 feet mean sea level (msl), Lake Tahoe datum, and the dam is operated according to the Truckee River Agreement to prevent the lake from exceeding elevation 6,229.1 feet msl.

landowners at Lake Tahoe over water rights, lake elevation, and attempts to pump water from the lake. Negotiations to settle these disputes resulted in the Truckee River Agreement of 1935 (TRA). Parties to TRA are Interior, Sierra Pacific, TCID, WCWCD, and other water right owners ("parties of the fifth part").

During the 1930s, additional water storage was purchased and developed to further control flows in the Truckee River system. In 1939, Sierra Pacific reconstructed Independence Lake Dam with an associated reservoir capacity of 3,000 acre-feet and additional capacity of 14,500 acre-feet, for a total capacity of 17,500 acre-feet. In 1943, Sierra Pacific and TCID purchased the rights to 9,500 acre-feet of storage in Donner Lake. Operation of Donner Lake is governed by the Donner Lake Indenture.

Following Congressional authorization for the Truckee Storage Project in 1935, Reclamation began construction of Boca Dam on the Little Truckee River. Construction was completed in 1939. The dam is operated by WCWCD.

In 1944, the U.S. District Court for the District of Nevada entered a final decree (*Orr Ditch* decree) in the quiet title action brought by the United States in 1913 to determine water rights on the Truckee River. The *Orr Ditch* decree affirmed individual water rights as to the "amount, place and type of use, and priority" in Nevada and incorporated TRA, which provided for operation of Lake Tahoe and Boca Reservoir to serve those rights. Parties to the *Orr Ditch* decree include the United States, Sierra Pacific, WCWCD, and individual water rights holders in Nevada, many of them agricultural water users in Truckee Meadows; subsequent to the entry of final judgment in the *Orr Ditch* case, the Pyramid Tribe intervened and is now a party to the decree.

Following Congressional authorization of the Washoe Project in 1958, Reclamation completed construction of Prosser Creek Dam on Prosser Creek in 1962. An agreement among Reclamation, Sierra Pacific, TCID, and WCWCD, the Tahoe-Prosser Exchange Agreement (TPEA) of 1959, provides for the conjunctive operation of Lake Tahoe Dam and Prosser Creek Dam. A purpose of TPEA—the first agreement in the Truckee River basin to exchange water stored in one reservoir with water stored in another reservoir to achieve multiple benefits—was to maintain fish flows in the Truckee River immediately downstream from Lake Tahoe. Also under authorization of the Washoe Project Act, Reclamation completed construction of Stampede Dam on the Little Truckee River in 1970. As a result of litigation (Carson-Truckee Water Conservancy District v. Watt, 1982), a Federal court upheld a determination of the Secretary that his obligations under ESA took precedence over his obligation to contract for delivery of water for irrigation and M&I uses from Stampede Reservoir. The court ruled that the Secretary must utilize all Project Water 15 stored in Stampede Reservoir for the benefit of the Pyramid Lake fishes until the cui-ui and LCT are no longer threatened or endangered, or until sufficient water for their conservation becomes available from other sources.

<sup>&</sup>lt;sup>15</sup> Project Water is water stored in Lake Tahoe, Prosser Creek Reservoir, Stampede Reservoir, and Boca Reservoir pursuant to existing storage licenses or permit.

In 1967, the Secretary issued regulations for the Newlands Project known as OCAP. The principal purpose of OCAP was to regulate diversions at Derby Diversion Dam to maximize use of Carson River water and minimize use of Truckee River water for the Newlands Project. As a result of litigation (*Pyramid Lake Paiute Tribe of Indians* v. *Morton*, 1973), a Federal court ruled that OCAP then in effect was insufficiently protective of Pyramid Lake. The Secretary issued new OCAP in February 1973 to comply with the court's order. The 1973 OCAP imposed stricter limits on diversions from the Truckee River to the Newlands Project than had the previous OCAP.

In 1968, the California-Nevada Interstate Compact Commission approved a provisional Interstate Compact (Compact) for allocation of the waters of the Lake Tahoe, Truckee, and Carson basins. The Compact was ratified by California and Nevada in 1970 and 1971, respectively, but never ratified by the Congress. Even without such approval, the States have generally agreed to honor the Compact's allocations which are similar to the allocations in section 204 of P.L. 101-618 (incorporating modifications to address concerns of the United States and Pyramid Tribe), that would be implemented when TROA becomes effective.

In 1980, the U.S. District Court for the District of Nevada entered a final decree (*Alpine* decree) in response to *United States* v. *Alpine Land and Reservoir Company*, et al., CV-D-183, a quiet title action brought by the United States, which adjudicated the rights and priorities to use the surface waters of the Carson River in California and Nevada, including for storage in Lahontan Reservoir and use on the Newlands Project, and established water duties for use on various lands. Following the entry of a final *Alpine* decree and the signing of a new contract between Reclamation and TCID in 1984, Interior issued a series of three, one-year "interim OCAP" while a longer term OCAP was prepared. OCAP was issued in 1988, and adjusted most recently in December 1997.

The Preliminary Settlement Agreement was entered into in 1989 by Sierra Pacific and the Pyramid Tribe to provide for more flexible operation of Federal reservoirs and the exercise of water rights of the parties to (1) improve spawning conditions for the Pyramid Lake fishes and (2) provide additional M&I water for Truckee Meadows during drought periods. Thus, under that agreement, Sierra Pacific agreed, among other things, to waive or change its rights to require releases of water from Truckee River reservoirs for hydroelectric power generation under the *Truckee River General Electric* and the *Orr Ditch* decrees. To address concerns of the United States, it was later changed to Preliminary Settlement Agreement as Modified by the Ratification Agreement (PSA).

P.L. 101-618 was enacted by Congress in 1990 to provide the direction, the authorities, and the mechanisms for resolving a number of issues involving water resources and water rights in the Truckee River and Carson River basins, among other matters. To achieve these purposes, P.L. 101-618 directs, among other actions, negotiation of an operating agreement for Truckee River reservoirs (i.e., TROA), and that that agreement, in part, carry out the terms, conditions, and contingencies of PSA.

The Interim Storage Agreement among the Secretary, Sierra Pacific, WCWCD, and the Pyramid Tribe, agreed to in 1994, allows Sierra Pacific (now TMWA) to store privately owned water in Stampede and Boca Reservoirs to meet domestic, municipal, and industrial water needs in Truckee Meadows during drought situations. This agreement will be superseded by TROA when TROA is implemented.

On October 10, 1996, the U.S. Department of Justice (Justice), U.S. Environmental Protection Agency, and Interior joined the Nevada Division of Environmental Protection, Washoe County, Reno, Sparks, and Pyramid Tribe in signing the Truckee River Water Quality Settlement Agreement (WQSA). WQSA resulted in dismissal of litigation over expansion of the Reno-Sparks wastewater treatment facility (Truckee Meadows Water Reclamation Facility). WQSA establishes a program to improve water quality by increasing flows in the Truckee River through the purchase and dedication of Truckee River water rights for instream flow. It obligates the United States and Truckee Meadows communities to each acquire \$12 million worth of Truckee River water rights and transfer those rights for the purposes of water quality and instream flow in the lower Truckee River and Pyramid Lake. Water associated with the exercise of water rights acquired pursuant to WQSA would be stored, when possible, in Truckee River reservoirs and would be managed by the parties acquiring water rights under WQSA and by the Pyramid Tribe.

On August 28, 2007, the negotiators for the signatories—Interior and Justice, California and Nevada, Pyramid Tribe, TMWA, and other entities in California and Nevada—approved a proposed Negotiated Agreement for the final EIS/EIR. The result of 17 years of negotiations, it represents the negotiators' proposed action and preferred alternative for operating reservoirs in the Lake Tahoe and Truckee River basins in a manner that will carry out terms of P.L. 101-618, as described elsewhere in this document.

## B. Water Rights Administration on the Truckee River Today

Water rights in California and Nevada generally are administered by SWRCB and the Nevada State Engineer, respectively. California surface water rights may be held under riparian or appropriative rights or certain other doctrines. California has no statewide system for administering groundwater rights, except for subterranean streams flowing through known and definite underground channels; such water is subject to the water rights process for surface water (CWC section 1200). Nevada water law is based on the appropriative rights doctrine with a statewide water rights system for administering both surface water and groundwater.

<sup>&</sup>lt;sup>16</sup> Groundwater rights are regulated in certain parts of California, mostly by local agencies. Certain groundwater basins have been specially adjudicated; others are regulated by a special act management district or by a county which has adopted a groundwater ordinance.

In California, under the riparian rights doctrine, persons owning land contiguous to a stream or a lake have the right to make reasonable use of the water's natural flow (precluding long-term storage) on such lands within the watershed of the stream or lake. All riparians share the natural flow irrespective of priority (see following), and their rights are correlative; if the flow decreases, each riparian's share decreases proportionately. Riparian rights may not be used outside the boundaries of the riparian holding, and cannot be sold or transferred for use on nonriparian land. Riparian rights are not lost through nonuse or forfeiture. No water right permit is required for riparian use in California, but such users are required to file a "Statement of Water Diversion and Use" with SWRCB. There are few riparian rights on the Truckee River, and no riparian rights are affected by TROA.

In California and Nevada, the appropriative rights doctrine is based on the concept of first in time, first in right, i.e., the first person to take a quantity of water and put it to beneficial use (e.g., agriculture, M&I, domestic use, hydroelectric power generation, or recreation) has a higher ("senior") priority of right of use than a subsequent ("junior") appropriative user. Senior rights must be fully satisfied before a junior appropriator may divert water. A person initiating a modern appropriative right must file an application with SWRCB or the Nevada State Engineer. Approval of the application results in the issuance of a water right permit, which may later be converted into a license (California) or certificate (Nevada). At the time of licensing or certification, the right may be limited to what the permittee has actually used. The license, certificate, or permit will identify point(s) of diversion, purpose(s) of use, and place(s) of use for the water to serve the project. Although the actual practices and terminology may vary between California and Nevada, in general, the use of an appropriative water right (referred to as "exercise") may involve capturing and retaining streamflow in a reservoir ("diversion to storage" or "storage"), removing water from a stream ("direct diversion") or reservoir ("rediversion"), or retaining water in a stream and allowing it to continue to flow. 17

Appropriative rights may be sold or transferred from land to which they are appurtenant. An appropriative right may be lost through non-use in California, if the water is not put to beneficial use for a period of 5 years ("forfeiture"); in Nevada, an appropriative water right may be lost through abandonment, which requires proof of intent to forsake or relinquish the right. An application or petition must be filed with the Nevada State Engineer or SWRCB to change the manner, type, or place of use of a water right. All actions regarding appropriative water rights are public processes.

In *National Audubon Society* v. *Superior Court*, the California Supreme Court held that California water law is an integration of the public trust doctrine and the appropriative water right system. The public trust doctrine, which arose from the sovereign ownership

<sup>&</sup>lt;sup>17</sup> Nevada law recognizes appropriation of water for instream (or "*in situ*") uses, where the appropriated water is allowed to remain in the stream to serve fish and wildlife or recreational uses. California law does not recognize appropriation of water for instream uses, but it does allow an owner of an appropriative or riparian or other water right to petition SWRCB to change it into an instream flow right (CWC section 1707). In addition, California has a number of regulatory statutes and the public trust doctrine, which can require maintenance of instream flows.

of tidelands and navigable river beds, requires the State to protect public trust resources, such as fish and wildlife, recreation, and environmental values. The *Audubon* case holds that the State has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and no water right holder has a vested right to use water in a manner harmful to the trust. When SWRCB approves a water diversion, therefore, it must consider the effect of such diversions on public trust resources and avoid or minimize any harm to those resources where feasible. The California courts and SWRCB have concurrent jurisdiction to review diversions of water and their impacts on public trust resources. All uses of water, including public trust uses, must conform to the standard of reasonable use under the California Constitution, article X, section 2.

With the exception of Lake Tahoe, Federal reclamation projects in the Truckee River basin hold permits or licenses from California. In Nevada, Truckee River water rights are administered pursuant to the *Orr Ditch* decree. The Federal Water Master appointed by the *Orr Ditch* court oversees and coordinates reservoir operations and the delivery of water for *Orr Ditch* decree water rights, as well as maintains a water accounting system and issues TMWA daily reports of hydrologic data measurements. The Nevada State Engineer has primary jurisdiction over applications to change the manner, purpose, or place of use of water rights subject to the *Orr Ditch* decree. (General operations under administration of the Federal Water Master are described in the following section.)

# C. Current Reservoir and River Operations in the Truckee River Basin

The Truckee River is a highly regulated river system. Dams at the outlet of Lake Tahoe and on several major tributaries in the Truckee River basin (location map) create reservoirs that together can store about a million acre-feet of water. As described previously, a number of court decrees, agreements, and regulations govern day-to-day operations of these reservoirs, administered by the Federal Water Master for the *Orr Ditch* court. The reservoirs are operated to capture runoff as available when flow in the river is greater than that needed to serve downstream water rights in Nevada and to maintain prescribed streamflows, known as Floriston Rates, in the Truckee River measured at the Farad gauge near the California-Nevada State line. Floriston Rates provide water to serve hydroelectric power generation, M&I use in Truckee Meadows, streamflow, and agricultural water rights. In general, reservoir releases are made as necessary to meet dam safety or flood control requirements and to serve water rights when unregulated flow cannot be diverted to serve those rights. Minimum reservoir releases are maintained as specified in applicable agreements and the reservoir licenses and/or permits.

In general, each reservoir currently has authorization to serve specific uses. For example, Lake Tahoe and Boca Reservoir are jointly operated to store and release Floriston Rate Water solely to maintain Floriston Rates. Prosser Creek and Stampede Reservoirs store and release Project Water at specific times to benefit cui-ui and LCT of the lower Truckee River and Pyramid Lake. Project Water in Prosser Creek Reservoir is also exchanged with Floriston Rate Water in Lake Tahoe to maintain prescribed minimum

flows in the Truckee River immediately downstream from Lake Tahoe Dam. Martis Creek Reservoir, a U.S. Army Corps of Engineers facility, is only used for flood control. Independence Lake is operated to supplement water for M&I use in Truckee Meadows, hydroelectric power generation, and occasionally to assist in achieving Floriston Rates. Donner Lake is operated for lake-related recreation and to supplement water M&I use in Truckee Meadows, hydroelectric power generation, occasionally to assist in achieving Floriston Rates, and for irrigation on the Newlands Project when allowed by OCAP.

A more detailed description of current reservoir operations is presented in the discussion of the No Action Alternative in chapter 2.

#### VI. Other Authorities

In addition to the pertinent court decrees, decisions, laws, regulations, and agreements that govern water storage and river operations in the Truckee River basin discussed previously, TROA may be subject to some or all of the environmental authorities listed in table 1.1.

## VII. Participating Agencies

## A. Signatories

The following entities participated in the negotiation and development of TROA and are the anticipated signatories (those identified by \* are mandatory signatories):

- Interior\*
- California\*
- Nevada\*
- TMWA\*
- Pyramid Tribe\*
- Sierra Pacific
- WCWCD
- City of Reno, Nevada
- City of Sparks, Nevada
- City of Fernley, Nevada
- Washoe County, Nevada
- Sierra Valley Water Company
- Carson-Truckee Water Conservancy District
- North Tahoe Public Utility District
- Truckee Donner Public Utility District

Table 1.1—Environmental authorities

Authority	Reference
National Environmental Policy Act	42 U.S.C. 4321 et seg.
Council on Environmental Quality Regulations	40 Code of Federal Regulations parts 1500-1508
Department of the Interior Implementing Procedures	516 Departmental Manual 1-7
Endangered Species Act, as amended	16 U.S.C. 1531 et seg.
National Historic Preservation Act and implementing regulations	16 U.S.C. 470 et seq. 36 Code of Federal Regulations 800
Antiquities Act of 1906	16 U.S.C. 431 et seq.
Archeological Resources Protection Act, as amended	16 U.S.C. 470aa et seq.
California Environmental Quality Act	Public Resources Code section 21000, et seq. Title 14, Section 15000 et seq. of the California Code of Regulations (commonly known as the CEQA Guidelines
California Environmental Justice	Government Code Section 65040.12 and Public Resources Code Section 72000
Clean Air Act	42 U.S.C. 7401 et seq.
Clean Water Act	33 U.S.C. 1251 et seq.
Pollution Prevention Act of 1990	42 U.S.C. 13101 et seq.
Safe Drinking Water Act	42 U.S.C. s/s 300f et seq.
Migratory Bird Treaty Act	16 U.S.C. 703-711
NEPA Protection and Enhancement of Environmental Quality	Executive Order No. 11512
National Historic Preservation Act	Executive Order No. 11593
Floodplain Management	Executive Order No. 11988
Protection of Wetlands	Executive Order No. 11990
Federal Compliance with Pollution Control Standards	Executive Order No. 12088
Environmental Justice	Executive Order No. 12898
Indian Sacred Sites	Executive Order No. 13007
Consultation and Coordination with Indian Tribal Governments	Executive Order No. 13084
Invasive Species	Executive Order No. 13112
Government to Government Relations with Native American Tribal Governments	Memorandum for the Heads of Executive Department and Agencies (April 29, 1994)
American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act	Secretarial Order No. 3206
Porter-Cologne Water Quality Control Act	California Water Code – Division 7
Prohibition on waste of water	California Constitution, article X, section 2
Beds and banks and Appropriation of water	California Public Trust Doctrine
Water rights administration and groundwater management	California Water Code – Divisions 1, 2, 6, 7
Historic preservation, wild and scenic rivers, and environmental quality	California Public Resources Code sections 5020, 21000, 5093
Endangered species, fish flows, and streambed alteration agreements	California Fish and Game Code sections 2050, 5937, 1601
Nevada Water Quality Standards	Nevada Revised Statutes 445A

#### B. Cooperating/Responsible Agencies

Most of the following are cooperating or responsible agencies and have jurisdiction by law over some aspect of TROA or contributed special expertise to the EIS/EIR:

- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Forest Service
- U.S. Geological Survey
- Bureau of Land Management
- California Department of Fish and Game
- California State Water Resources Control Board
- California State Lands Commission
- Lahontan Regional Water Quality Control Board
- California State Historic Preservation Officer
- Nevada Department of Conservation and Natural Resources
  - Nevada Division of Water Resources
- Nevada Department of Wildlife
- Nevada State Historic Preservation Office
- Washoe County, Nevada
- Truckee Meadows Water Authority
- Tahoe Regional Planning Agency

#### C. Interested Parties

The following non-Federal agencies and entities with an interest in the Truckee River and reservoir operations or with technical expertise contributed to the EIS/EIR:

- Truckee-Carson Irrigation District
- Churchill County, Nevada
- Fallon, Nevada
- Carson Water Subconservancy District
- Lahontan Valley Environmental Alliance
- Newlands Water Protective Association
- Lyon County, Nevada
- California Resources Agency
- Del Oro (Donner Lake) Water Company
- Glenshire Mutual Water Company
- South Tahoe Public Utility District
- Truckee River Basin Water Group

- Tahoe-Truckee Sanitation Agency
- o Town of Truckee
- Nevada County
- o Placer County
- Sierra County
- o North Tahoe Public Utility District
- o Tahoe City Public Utility District
- o Truckee Donner Public Utility District
- o Truckee Donner Recreation and Park District
- o Northstar Community Service District
- o Sierra Valley Water Company
- Alpine Springs County Water District
- o Squaw Valley Mutual Water Company
- o Squaw Valley Public Service District
- o Poulsen Water Company
- o Placer County Water Agency
- o Tahoe Resource Conservation District

## VIII. Summary of Issues

A public involvement program, beginning with public scoping meetings, encouraged the general public and governmental agencies to help identify issues related to the resources in the Truckee River basin. (See chapter 5 for detailed information.) The identified issues are summarized by the following statement:

 Modifying operations of Truckee River reservoirs could affect the storage and elevations of lakes and reservoirs and the quantity, quality, timing, and duration of flows, thus affecting related resources.

Potentially affected resources were grouped into the following categories:

- Water (surface water and groundwater supply, rights, quality, sedimentation, and erosion)
- Biological (fish, wildlife, and plants in and along reservoirs and streams, and endangered, threatened, and other special status species)
- Socio-economics (including recreational resources)
- Cultural
- Indian trust resources

These resources and related effects are described in chapter 3, "Affected Environment and Environmental Consequences."